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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,634

03/08/2007

Noriaki Fujii

060509

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23850 7590 06/16/2008  
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EXAMINER

ESHETE, ZELALEM

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

06/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,634	<b>Applicant(s)</b> FUJII ET AL.	
	<b>Examiner</b> Zelalem Eshete	<b>Art Unit</b> 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8 and 11 is/are rejected.
- 7) ☒ Claim(s) 2,6,7,9,10 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

This Office action is in response to the request for reconsideration filed on 4/15/2008.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3-5,8,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (2006/0102118) in view of Morita (JP08028235).

Regarding claim 1: Fujii discloses an engine valve operating system (see figure 1), comprising a rocker arm which has a valve connecting portion linked and connected to an engine valve and a cam-abutting portion to abut a valve operating cam (see numeral 18A); a first link arm with one end turnably connected to the rocker arm via a first connecting shaft and the other end turnably supported at a fixed position on an engine body (see numeral 19A,20A) ; a second link arm with one end turnably connected to the rocker arm via a second connecting shaft disposed side by side in a vertical arrangement with the first connecting shaft and the other end turnably supported by a movable shaft which is displaceable (see numeral 20A,19A); drive means

connected to the movable shaft, being ready to displace the movable shaft in order to vary a lift amount of the engine valve continuously (see abstract).

Fujii fails to disclose an oil supply means which is fixed to the engine body and supplies oil to the upper one of the first and second connecting shafts.

However, Morita teaches an oil supply means fixed to the engine body and supplies oil to valve actuating parts (see figures 1,5).

It would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the system of Fujii by providing an oil supply means as taught by Morita in order to lubricate the moving parts and thereby reduce frictional energy loss.

Regarding claim 3: Morita discloses the oil supply means is disposed on cam holders installed on the engine body so as to rotatably support a camshaft (31) on which the valve operating cam is mounted (see figure 5).

Regarding claim 4: Fujii as modified above discloses the claimed invention as recited above; and Morita further discloses the oil supply means which is formed of oil jets, each with a nozzle hole provided at the tip of a pipe, is disposed on opposite sides

of each cylinder on the engine body, in that such feature is obvious when adapted to a multi cylinders engine (see figures 4,5).

Regarding claim 5: Fujii as modified above discloses the claimed invention as recited above; and Morita further discloses the oil supply means which is formed of the oil jet with the nozzle hole provided at the tip of the pipe is disposed on one side of each cylinder on the engine body, in that such feature is obvious when adapted to a multi cylinders engine (see figures 4,5).

Regarding claim 8: Fujii as modified above discloses the claimed invention as recited above; and Morita further discloses the oil supply means which is formed of oil jets, each with a nozzle hole provided at the tip of a pipe, is disposed on opposite sides of each cylinder on the engine body, in that such feature is obvious when adapted to a multi cylinders engine (see figures 4,5).

Regarding claim 11: Fujii as modified above discloses the claimed invention as recited above; and Morita further discloses the oil supply means which is formed of the oil jet with the nozzle hole provided at the tip of the pipe is disposed on one side of each cylinder on the engine body, in that such feature is obvious when adapted to a multi cylinders engine (see figures 4,5).

***Allowable Subject Matter***

3. Claims 2,6,7,9,10,12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments filed 4/15/2008 have been fully considered but they are not persuasive.

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. In this instance, the primary reference, Fujii, discloses link arms connected to the rocker arm (figure 1). The secondary reference, Morita, is relied in teaching an oil supply means fixed to the engine body and supplies oil to valve actuating parts (figures 1,5). It would have been an obvious in modifying Fujii by the teaching of Morita in order to achieve lubrication at parts of Fujii's device for the well known effect of reducing loss of energy through friction. It also would have been an obvious adaptation change to

caliber the pressure of the oil flow consistent to the motivation of lubricating parts of Fujii's device.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zelalem Eshete whose telephone number is (571) 272-4860. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zelalem Eshete/  
Primary Examiner, Art Unit 3748